

REMARKS

Claim 1 is amended to include the limitations of claims 10 and 11 in combination. In addition, Applicants note that the first and second cipher translation tables are maintained as FIFO buffers of random codes. Support for the amendment is by way of the cancelled claims 10 and 11, as well as FIG. 8 and paragraphs [0048]-[0053], for example. Independent claims 12 and 19 are amended to include limitations similar to those of amended claim 1. In the discussion set forth below, Applicants do not acquiesce to any rejection or averment in the Office Action unless expressly stated. Claims 1, 3-9, 12 and 19 are pending in this application. Reconsideration and allowance of the application are respectfully requested.

Claims 1, 3-4, 8, 12 and 19 are understood to be patentable under 35 USC §103(a) over "Mahant-Shetti" (US Patent No. 7,068,617 to Mahant-Shetti et al.) in view of "Pickering" (U.S. Patent No. 6,408,019 to Pickering et al.); Claims 5-7 and 9 are understood to be patentable under 35 USC §103(a) over the Mahant-Shetti-Pickering combination in view of "Kim" (U.S. patent publication 2005/0041972 to Kim et al.); Claim 10 is understood to be patentable under 35 USC §103(a) over the Mahant-Shetti-Pickering combination in view of "Farwell" (U.S. Patent 5,184,347 to Farwell et al.); and Claim 11 is understood to be patentable under 35 USC §103(a) over the Mahant-Shetti-Pickering combination and the Examiner's official notice. The rejections are respectfully traversed because the Office Action does not establish *prima facie* cases of obviousness over the Mahant-Shetti-Pickering combination, over the Mahant-Shetti-Pickering-Kim combination, over the Mahant-Shetti-Pickering-Farwell combination, nor over the Mahant-Shetti-Pickering combination and official notice.

Applicants begin by noting that the Mahant-Shetti-Pickering combination does not suggest the limitations of claim 11, which are now included in claim 1, as the Examiner asserts. The limitations recite, "the controller includes, a first cipher translation table having an first input port coupled to one of the plurality of code generators, a second input port arranged to receive an input data value, and an output port coupled to one of the plurality of encoders, the first cipher translation table

configured with data values and associated random codes generated by the one code generator, wherein the first cipher translation table outputs the random code associated with and responsive to an input data value..." The teachings of Mahant-Shetti, which are cited by the Examiner (i.e., Mahant-Shetti's Abstract and claim 11), do not suggest these limitations.

Mahant-Shetti's Abstract reads as follows:

A CDMA receiver is provided which is operable to receive a CDMA encoded signal and decode the information therein utilizing a selected code. The systems utilizes a plurality of multiply-accumulation blocks (40) which are operable to receive the signal and compare the received signal with a Walsh-Hadamard code. The comparison and the accumulation is made only in the middle of a chip clock with the edges thereof blanked. This information in the middle of the chip clock is accumulated in an accumulator, the MAC (40), for a symbol period. This is then compared with a look up table and then a decision made as to the logic value thereof.

Mahant-Shetti's claim 11, in relevant part, reads as follows:

11. The CDMA decoder of claim 10, wherein said subtraction device comprises: a table device for storing defined predetermined relationships between the output of each of said multiply or accumulate devices for a signal input thereto on its associated channel and the output therefrom for signals input thereto for selected other channels, said relationship comprising a scale factor for the analog result;...

Neither the table referenced in Mahant-Shetti's Abstract nor the table referenced in Mahant-Shetti's claim 11 corresponds to the claimed cipher translation table.

Applicants first note that Mahant-Shetti's disclosure is for a receiver (Title), and Mahant-Shetti's claim 10, from which Mahant-Shetti's claim 11 depends, is for "a CDMA decoder." Thus, neither of the tables referenced in Mahant-Shetti's Abstract and claim 11 can reasonably suggest the claimed first cipher translation table since the claimed first cipher translation table provides the random codes to an encoder ("first cipher translation table having an first input port coupled to one of the plurality of code generators, a second input port arranged to receive an input data value, and an output port coupled to one of the plurality of encoders ... wherein the first cipher translation table outputs the random code associated with and responsive to an input data value...").

Applicants further note that the tables referenced in Mahant-Shetti's Abstract and claim 11 clearly do not correspond to the limitations recited for the claimed first cipher translation table. The claimed first cipher translation table is configured with data values and associated random codes generated by the one code generator, and the first cipher translation table outputs the random code associated with and responsive to an input data value. In contrast, Mahant-Shetti's Abstract, discloses that the information in the middle of the chip clock is accumulated in an accumulator for a symbol period, and that this is then compared with a look up table for purposes of deciding on the logic value. Mahant-Shetti's table of claim 11 stores predefined relationships between the output of each multiply or accumulate device on its channel and the outputs for selected other channels. Thus, neither of these tables suggests in any apparent manner the claimed first cipher translation table that provides the random codes. If the rejection is maintained, Applicant respectfully requests an explanation of how the Examiner views Mahant-Shetti's tables as providing the random codes.

The further limitations of claim 1 recite that "the controller maintains the first and second cipher translation tables as first-in-first-out (FIFO) buffers of random codes." The Mahant-Shetti-Pickering-Farwell combination neither teaches nor suggests these limitations, and the Examiner has not provided evidence for combining the teachings. The Examiner cited Farwell's FIG. 4 and elements 451 and 455 as corresponding to the claimed FIFO buffer. However, Farwell's FIFOs 451 and 455 apparently buffer data transmitted between a LAN bus interface 450 and a fiber interface 454. There is no apparent relevance to the claimed maintaining of a cipher translation table as a FIFO buffer. Farwell's teachings merely suggest using FIFO buffers to buffer data transmitted between two interfaces. There is no apparent suggestion of maintaining any cipher translation table as a FIFO buffer.

The asserted motivation for combining the teachings of Farwell with those of the Mahant-Shetti-Pickering combination is improper as being conclusory and unsupported by evidence. The Examiner asserted that combining the teachings would have been obvious "in order to process data more smoothly." Applicant respectfully submits that the Examiner has not submitted any evidence that the Mahant-Shetti-Pickering combination processes data in a manner that is not smooth. Nor has the Examiner


presented any evidence of how processing by the Mahant-Shetti-Pickering combination would be smoothed with FIFOs. Therefore, the asserted motivation is unsupported by evidence and improper.

Applicants respectfully request that the rejection of claims 1, 3-12 and 19 be withdrawn since *prima facie* cases of obviousness have not been established over the Mahant-Shetti-Pickering, Mahant-Shetti-Pickering-Kim, Mahant-Shetti-Pickering-Farwell, and Mahant-Shetti-Pickering-official-notice combinations.

CONCLUSION

Reconsideration and a notice of allowance are respectfully requested in view of the Remarks presented above. If the Examiner has any questions or concerns, a telephone call to the undersigned is invited.

Respectfully submitted,

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